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Johnstown	Cambria County Library System		Mineral Science Library Pennsylvania State University, Pattee Library
Kutztown	Kutztown University, Rohrbach Library	Villanova	Villanova University, Falvey Library
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PENNSYLVANIA GEOLOGICAL PUBLICATIONS

Compiled by Caron O'Neil and Anne B. Lutz

Pennsylvania Geological Survey

COVER: A typical scene of a Pennsylvanian-age coal swamp. Such swamps were common throughout much of Pennsylvania about 300 million years ago. Vegetation accumulated, was buried, and later was converted to the bituminous and anthracite coalbeds mined in Pennsylvania today. The ancestral dragonfly in the foreground had a wingspread of about 2 feet. Drafted by John G. Kuchinski.

PENNSYLVANIA GEOLOGICAL SURVEY

FOURTH SERIES

HARRISBURG

1998

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HOW TO ORDER PUBLICATIONS

Unless otherwise noted, **free publications, open-file reports,** or **reports marked by a double dagger** (‡) may be obtained from:

Department of Conservation and Natural Resources Bureau of Topographic and Geologic Survey P. O. Box 8453 Harrisburg, PA 17105–8453 717–787–2169 Other publications may be purchased over the counter (OC) or by mail (M) from:

Department of General Services State Book Store 1825 Stanley Drive Harrisburg, PA 17103-1257 717-787-5109

Add **6 percent state sales tax** to the price of all publications purchased over the counter or mailed to a Pennsylvania address, except those marked by ‡. Prices of publications marked by ‡ already include state sales tax. If an order is to be mailed to a foreign address, include an additional \$3.75 for postage and handling. **Optional insurance** is available for publications purchased by mail from the State Book Store; to guarantee the replacement of publications that are damaged or lost in transit, add 10 percent to the cost of each publication ordered. Make check or money order payable to **Commonwealth of Pennsylvania**. Stamps will not be accepted as payment. Order forms are included at the back of this book for your convenience.

HOW TO OBTAIN TOPOGRAPHIC MAPS OF PENNSYLVANIA

Topographic maps of Pennsylvania are prepared by the U.S. Geological Survey in cooperation with the Pennsylvania Bureau of Topographic and Geologic Survey. Persons wishing to know the names and scales of topographic maps that are available for Pennsylvania should refer to Pennsylvania—Index to Topographic and Other Map Coverage. Names, dates, and prices of maps currently available are listed in Catalog of Topographic and Other Published Maps. Both of these publications are free upon request from either of the following agencies:

Department of Conservation and Natural Resources Bureau of Topographic and Geologic Survey P. O. Box 8453 Harrisburg, PA 17105–8453 717–787–2169 http://www.dcnr.state.pa.us/topogeo/> U.S. Geological Survey Information Services P. O. Box 25286
Denver, CO 80225
1–800-435-7627
http://www.usgs.gov>

Topographic maps may be purchased from the U.S. Geological Survey at the address listed in the right-hand column above. Ordering information and order forms are included in **Catalog of Topographic and Other Published Maps.**

or

THE GEOLOGICAL SURVEYS OF PENNSYLVANIA

There have been four geological surveys of Pennsylvania and four resulting series of publications:

First Survey, 1836–1842: Publications—6 annual reports, 2 quarto-volumes, and a state geologic map.

Second Survey, 1874–1889: Publications—81 volumes, 35 atlases, and 6 grand atlases.

Third (Commission) Survey, 1899–1914: Publications—6 biennial reports and 12 economic reports, some of which are listed in this book.

Fourth Survey, 1919– : Most publications (fourth series) are listed in this book. The list does not include superseded or replaced reports that are out of print.

All reports of the first three geological surveys and some of the reports of the present (fourth) survey are out of print.

SOURCES OF OUT-OF-PRINT REPORTS

Many reports appearing in this list of publications are marked with an asterisk (*), indicating that they are out of print and no longer available for distribution. Some reports are marked with a dagger (†), indicating that they are temporarily out of print and that new editions are in preparation. Out-of-print reports are available for study in many libraries throughout the state (see list on inside front cover).

The library of the Bureau of Topographic and Geologic Survey, Second Floor, Evangelical Press Building, 1500 N. Third Street, Harrisburg, telephone 717–783–8077, is open for public use and contains most of the Pennsylvania Survey reports, as well as many of the U.S. Geological Survey and other governmental and institutional reports related to Pennsylvania.

BIBLIOGRAPHIES OF PENNSYLVANIA GEOLOGY

For a more comprehensive, annotated listing of publications dealing with Pennsylvania geology through 1979, including journal articles and nongovernmental publications, please refer to the following General Geology Reports published by the Bureau of Topographic and Geologic Survey: **G 34**, **G 42**, **G 61**, and **G 73**, listed on pages 10, 11, and 12 of this book.

For a complete listing of U.S. Geological Survey publications on the geology and water resources of Pennsylvania from 1879 to 1988, refer to **List of U.S. Geological Survey Geologic and Water-Supply Reports and Maps for Pennsylvania and New Jersey.** This publication may be purchased from U.S. Geological Survey Information Services, P. O. Box 25286, Denver, CO 80225, telephone 303–202–4700. The price is \$2.50 plus \$3.50 for shipping and handling; please make check payable to *U.S. Geological Survey*.

MAP SCALES

Common map scales referred to in the list of publications and their equivalent distances are as follows:

SCALE	EQUIVALENT DISTANCE	SCALE	EQUIVALENT DISTANCE
1:6,000	1 inch = 500 feet	1:125,000	1 inch = approx. 2 miles
1:12,000	1 inch = 1,000 feet	1:250,000	1 inch = approx. 4 miles
1:16,000	1 inch = 1,333 feet	1:500,000	1 inch = approx. 8 miles
1:24,000	1 inch = 2,000 feet	1:380,160	1 inch = 6 miles
1:48,000	1 inch = 4,000 feet	1:1,000,000	1 inch = approx. 16 miles
1:50,000	1 inch = 4,167 feet	1:2,000,000	1 inch = approx. 32 miles
1:62,500	1 inch = approx. 1 mile	1:2,500,000	1 inch = approx. 40 miles

Other map scales cited in the list are followed by their equivalent distances.

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FORMAT, SYMBOLS, AND ABBREVIATIONS

The list of publications is arranged by series of reports in alphabetical order. Within each series, the reports are listed in numerical order. In the three-column format, the left column indicates the report series and number. The middle column contains bibliographic information such as the title, author(s), year of publication, number of pages, and number of plates. Also included in this column are notations of bedrock and surficial geologic maps, economic geologic maps, and other maps of particular interest, as well as the scales of the maps. The right column contains information on the printing status of each report and prices of reports that are in print. The abbreviations and symbols used in the right column are as follows:

OR SYMBOL	MEANING
*	Out of print (see "Sources of Out-of-Print Reports" at the top of this page)
†	Temporarily out of print; new edition in preparation
‡	Partial report (plates only); books are in press and will be available for purchase at a
	later date (see "How to Order Publications" on page 1)
OC	Over the counter (see "How to Order Publications" on page 1)
M	Mail (see "How to Order Publications" on page 1)

LIST OF PUBLICATIONS

PENNSYLVANIA GEOLOGICAL SURVEY

Fourth Series

ATLAS SERIES

(Map scale 1:24,000 unless otherwise indicated.)

•	•		
A	5	New Castle quadrangle—Geology and mineral resources (Bessemer, New Castle South, New Galilee, and Beaver Falls 7.5-minute quadrangles, Lawrence and Beaver Counties), F. W. DeWolf. 1929. 238 p., 18 pls., bedrock geol. map, surficial geol. map, econ. geol. map, scale 1:62,500	*
Α	27	Geology and mineral resources of the Pittsburgh quadrangle, Pennsylvania (Pittsburgh East, Braddock, Glassport, and McKeesport 7.5-minute quadrangles, Allegheny and Westmoreland Counties), M. E. Johnson. 1929; 3rd printing, 1974. 236 p., 33 pls., geol. map, min. resource map, scale 1:62,500	*
А	33a	Geology and mineral resources of the Oil City quadrangle, Venango County, Pennsylvania, A. N. Ward, Jr., M. T. Lukert, and W. F. Chapman. 1979. Geol. map and text on 1 pl.	5.90 (OC) 7.15 (M)
Α	36	Freeport quadrangle—Geology and mineral resources (Freeport, Leechburg, New Kensington East, and Vandergrift 7.5-minute quadrangles, Armstrong, Westmoreland, Allegheny, and Butler Counties), H. H. Hughes. 1933. 272 p., 9 pls., geol. map, scale 1:62,500	2.00 (OC) 3.25 (M)
Α	37	Mineral resources of the Greensburg quadrangle, Westmoreland County, Pennsylvania (Murrysville, Slickville, Irwin, and Greensburg 7.5-minute quadrangles), M. E. Johnson. 1925; 3rd printing, 1974. 162 p., 13 pls., geol. map, econ. geol. map, scale 1:62,500	*
А	48	Geology and mineral resources of the Donegal quadrangle, Pennsylvania (Mammoth, Stahlstown, Donegal, and Seven Springs 7.5-minute quadrangles, Westmoreland, Fayette, and Somerset Counties), M. N. Shaffner. 1963. 116 p., 4 pls., geol. map, coal reserve maps, scale 1:62,500	3.70 (OC) 4.95 (M)
Α	54	Geology and mineral resources of the Brookville quadrangle, Pennsylvania (Corsica, Brookville, Summerville, and Coolspring 7.5-minute quadrangles, Jefferson and Clarion Counties), C. K. Graeber and R. M. Foose. 1942; 3rd printing, 1974. 136 p., 16 pls., geol. map, min. resource map, scale 1:62,500	*
Α	55	Geology and mineral resources of the Smicksburg quadrangle, Pennsylvania (Dayton, Valier, Plumville, and Marion Center 7.5-minute quadrangles, Jefferson, Indiana, and Armstrong Counties), M. N. Shaffner. 1946; 2nd printing, 1969. 252 p., 11 pls., geol. map, min. resource map, scale 1:62,500	10.10 (OC) 11.35 (M)
Α	57	Geology and mineral resources of the New Florence quadrangle, Pennsylvania (Bolivar, New Florence, Wilpen, and Rachelwood 7.5-minute quadrangles, Indiana, Westmoreland, Cambria, and Somerset Counties), M. N. Shaffner. 1958. 165 p., 13 pls., geol. and min. resource map, scale 1:62,500; coal reserve maps, scale approx. 1:84,000 (1 in. = approx. 1.3 mi)	5.50 (OC) 7.45 (M)
Α	64	Geology and mineral resources of the Hazen, Falls Creek, Reynoldsville, and DuBois quadrangles, Clearfield and Jefferson Counties, Pennsylvania, A. D. Glover and W. A. Bragonier. 1978. 131 p., 16 pls., geol. map, scale 1:24,000; coal resource maps, scale 1:48,000	24.80 (OC) 27.05 (M)
Α	65	Geology and mineral resources of the Punxsutawney quadrangle, Pennsylvania (Punxsutawney, McGees Mills, Rochester Mills, and Burnside 7.5-minute quadrangles, Jefferson, Indiana, and Clearfield Counties), G. H. Ashley. 1926; 2nd printing, 1969. 145 p., 6 pls., geol. map, min. resource map, scale 1:62,500	8.05 (OC) 9.25 (M)

A 74ab	Geology and mineral resources of the Sabula and Penfield quadrangles, Clearfield, Elk, and Jefferson Counties, Pennsylvania, T. M. Berg and A. D. Glover. 1976. 98 p., 10 pls., geol. map, scale 1:24,000; coal reserve map, foundation and excavation map, scale 1:48,000	21.60 (OC) 23.85 (M)
A 74cd	Geology and mineral resources of the southern half of the Penfield 15-minute quadrangle, Pennsylvania (Luthersburg and Elliott Park 7.5-minute quadrangles, Clearfield County), W. E. Edmunds and T. M. Berg. 1971; 2nd printing, 1973. 184 p., 22 pls., geol. map, scale 1:24,000; coal reserve maps, foundation and excavation map, scale 1:48,000	9.90 (OC) 12.15 (M)
A 75	Geology and mineral resources of the Curwensville quadrangle (Mahaffey, Curwensville, Westover, and Irvona 7.5-minute quadrangles, Clearfield County), G. H. Ashley. 1940; 3rd printing, 1974. 140 p., 4 pls., geol. map, min. resource map, scale 1:62,500	6.90 (OC) 8.25 (M)
A 84cd	Geology and mineral resources of the southern half of the Clearfield 15-minute quadrangle, Pennsylvania (Clearfield and Lecontes Mills 7.5-minute quadrangles, Clearfield County), A. D. Glover. 1970; 2nd printing, 1973. 139 p., 15 pls., geol. map, scale 1:24,000; coal reserve maps, foundation and excavation map, scale 1:48,000.	8.50 (OC) 10.75 (M)
A 85ab	Geology and mineral resources of the northern half of the Houtzdale 15-minute quadrangle, Pennsylvania (Glen Richey and Wallaceton 7.5-minute quadrangles, Clearfield County), W. E. Edmunds. 1968; 2nd printing, 1973. 150 p., 15 pls., geol. map, scale 1:24,000; coal reserve maps, scale 1:48,000	7.60 (OC) 9.85 (M)
A 85cd	Geology and mineral resources of the Ramey and Houtzdale quadrangles, Clearfield and Centre Counties, Pennsylvania, G. B. Glass, W. E. Edmunds, V. C. Shepps, and others. 1977. 94 p., 10 pls., geol. map, scale 1:24,000; coal resource maps, foundation and excavation map, scale 1:48,000	21.30 (OC) 23.55 (M)
A 86	Geology and mineral resources of the Blandburg, Tipton, Altoona, and Bellwood quadrangles, Blair, Cambria, Clearfield, and Centre Counties, Pennsylvania, R. T. Faill, A. D. Glover, and J. H. Way. 1989. 209 p., 10 pls., bedrock geol. map, scale 1:24,000; surficial geol. map, coal resource maps, scale 1:48,000	33.00 (OC) 35.25 (M)
A 95a	Geology and mineral resources of the Philipsburg 7½-minute quadrangle, Centre and Clearfield Counties, Pennsylvania, G. B. Glass. 1972. 241 p., 20 pls., geol. map, scale 1:24,000; coal reserve maps, foundation and excavation map, scale 1:48,000	11.60 (OC) 13.85 (M)
A 96	Tyrone quadrangle—Geology and mineral resources (Tyrone, Franklinville, Spruce Creek, and Alexandria 7.5-minute quadrangles, Blair, Huntingdon, and Centre Counties), Charles Butts, F. M. Swartz, and Bradford Willard. 1939. 118 p., 14 pls., geol. map, scale 1:62,500	*
A 109a	Bedrock and surficial geology of the McConnellsburg quadrangle, Pennsylvania (Fulton and Franklin Counties), K. L. Pierce. 1966; 2nd printing, 1974. 111 p., 3 pls., bedrock geol. map, surficial geol. map	4.80 (OC) 6.75 (M)
A 119ab	Geology and mineral resources of northeastern Franklin County, Pennsylvania, S. I. Root. 1971; 3rd printing, 1992. 104 p., 2 pls., geol. map	13.30 (OC) 14.60 (M)
A 119cd	Geology and mineral resources of southeastern Franklin County, Pennsylvania, S. I. Root. 1968. 118 p., 2 pls., geol. map	3.80 (OC) 4.45 (M)
A 124a	Geology and mineral resources of the Lock Haven quadrangle, Clinton and Lycoming Counties, Pennsylvania, A. R. Taylor. 1977. Geol. map and text on 1 pl.	6.40 (OC) 7.05 (M)
A 126	Geology and mineral resources of the Mifflintown quadrangle, Pennsylvania (Alfarata, McClure, Mifflintown, and Mexico 7.5-minute quadrangles, Juniata,	

ATLAS SERIES 5

	Mifflin, and Snyder Counties), R. R. Conlin and D. M. Hoskins. 1962. 46 p., 2 pls., geol. map	5.50 (OC) 6.15 (M)
A 127	Geology and mineral resources of the Loysville quadrangle, Pennsylvania (Spruce Hill, Ickesburg, Andersonburg, and Landisburg 7.5-minute quadrangles, Perry, Juniata, and Cumberland Counties), J. T. Miller. 1961. 47 p., 2 pls., geol. map	10.20 (OC) 12.05 (M)
A 129a	Geology of the Caledonia Park quadrangle area, South Mountain, Pennsylvania (Adams, Cumberland, and Franklin Counties), J. L. Fauth. 1968; 2nd printing, 1992. 133 p., 7 pls., geol. map	18.55 (OC) 19.85 (M)
A 129c	Geology and mineral resources of the Iron Springs area, Adams and Franklin Counties, Pennsylvania, J. L. Fauth. 1978. 72 p., 1 pl., geol. map	8.05 (OC) 9.70 (M)
A 133cd	Geology and mineral resources of the Salladasburg and Cogan Station quadrangles, Lycoming County, Pennsylvania, R. T. Faill, R. B. Wells, and W. D. Sevon. 1977. 44 p., 2 pls., bedrock geol. map, surficial geol. map	12.90 (OC) 14.75 (M)
A 134ab	Geology and mineral resources of the Linden and Williamsport quadrangles, Lycoming County, Pennsylvania, R. T. Faill, R. B. Wells, and W. D. Sevon. 1977. 66 p., 2 pls., bedrock geol. map, surficial geol. map	15.20 (OC) 17.05 (M)
A 136	Geology and mineral resources of the Millerstown quadrangle, Perry, Juniata, and Snyder Counties, Pennsylvania (Beaver Springs, Richfield, Millerstown, and Reward 7.5-minute quadrangles), R. T. Faill and R. B. Wells. 1974. 276 p., 6 pls., geol. map, scale 1:24,000; tectonic and environ. geol. map, scale 1:48,000	26.45 (OC) 28.00 (M)
A 137ab	Geology and mineral resources of the northern half of the New Bloomfield quadrangle (Newport and Duncannon 7.5-minute quadrangles, Perry County), J. L. Dyson. 1963. 63 p., 1 pl., geol. map	2.90 (OC) 4.45 (M)
A 137cd	Geology and mineral resources of the southern half of the New Bloomfield quadrangle, Pennsylvania (Shermans Dale and Wertzville 7.5-minute quadrangles, Perry and Cumberland Counties), J. L. Dyson. 1967; 2nd printing, 1974. 86 p., 1 pl., geol. map	4.95 (OC) 6.85 (M)
A 138ab	Geology and mineral resources of the Carlisle and Mechanicsburg quadrangles, Cumberland County, Pennsylvania, S. I. Root. 1978. Geol. map and text on 1 pl.	7.80 (OC) 9.25 (M)
A 143cd	Geology and mineral resources of the Montoursville North and Huntersville quadrangles, Lycoming County, Pennsylvania, R. B. Wells and M. F. Bucek. 1980. 68 p., 2 pls., bedrock geol. map, surficial geol. map	15.10 (OC) 16.85 (M)
A 144ab	Geology and mineral resources of the Montoursville South and Muncy quadrangles and part of the Hughesville quadrangle, Lycoming, Northumberland, and Montour Counties, Pennsylvania, R. T. Faill. 1979. 114 p., 2 pls., bedrock geol. map, surficial geol. map	16.20 (OC) 18.15 (M)
A 144cd	Geology and mineral resources of the Allenwood and Milton quadrangles, Union and Northumberland Counties, Pennsylvania, J. D. Inners. 1997. 135 p., 3 pls., bedrock geol. map, surficial geol. map, scale 1:24,000; min. production map, scale 1:48,000	23.62 (OC) 25.36 (M)
A 146	Geology and mineral resources of the Millersburg 15-minute quadrangle, Dauphin, Juniata, Northumberland, Perry, and Snyder Counties, Pennsylvania (Dalmatia, Pillow, Millersburg, and Elizabethville 7.5-minute quadrangles), D. M. Hoskins. 1976. 38 p., 2 pls., geol. map	14.70 (OC) 16.45 (M)
A 148ab	Geology and mineral resources of the Harrisburg West area, Cumberland and York Counties, Pennsylvania, S. I. Root. 1977. 106 p., 1 pl., geol. map	11.10 (OC) 12.95 (M)
A 154cd	Geology and mineral resources of the Washingtonville and Millville quadrangles, Montour, Columbia, and Northumberland Counties, Pennsylvania, J. H. Way. 1993. 51 p., 2 pls., bedrock geol. map, surficial geol. map	14.80 (OC) 16.10 (M)

A 157d	Geology, mineral resources and environmental geology of the Palmyra quadrangle, Lebanon and Dauphin Counties, A. R. Geyer. 1970. 46 p., 1 pl., geol. map	3.30 (OC) 4.45 (M)
A 164cd	Geology and mineral resources of the Bloomsburg and Mifflinville quadrangles and part of the Catawissa quadrangle, Columbia County, Pennsylvania, J. D. Inners. 1981. 152 p., 2 pls., bedrock geol. map, surficial geol. map	16.30 (OC) 18.35 (M)
A 167c	Geology of the Lebanon quadrangle (Lebanon County), A. R. Geyer, Carlyle Gray, D. B. McLaughlin, and J. R. Moseley. 1958. 1 pl., geol. map with text on reverse	2.20 (OC) 3.45 (M)
A 167d	Geology of the Richland quadrangle (Lebanon and Lancaster Counties), Carlyle Gray, A. R. Geyer, and D. B. McLaughlin. 1958. 1 pl., geol. map with text on reverse	2.20 (OC) 3.35 (M)
A 168	Lancaster quadrangle—Geology and mineral resources (Manheim, Lititz, Columbia East, and Lancaster 7.5-minute quadrangles, Lancaster and Lebanon Counties), A. I. Jonas and G. W. Stose. 1930. 106 p., 23 pls., geol. map, scale 1:62,500	*
A 174c	Geology and mineral resources of the Berwick quadrangle, Luzerne and Columbia Counties, Pennsylvania, J. D. Inners. 1978. 34 p., 2 pls., bedrock geol. map, surficial geol. map.	13.80 (OC) 15.55 (M)
A 177c	Geology and mineral resources of the Womelsdorf quadrangle (Lancaster, Lebanon, and Berks Counties), A. R. Geyer, T. V. Buckwalter, D. B. McLaughlin, and Carlyle Gray. 1963. 96 p., 1 pl., geol. map	3.30 (OC) 5.05 (M)
A 177d	Geology and mineral resources of the Sinking Spring quadrangle, Berks and Lancaster Counties, Pennsylvania, D. B. MacLachlan, T. V. Buckwalter, and D. B. McLaughlin. 1975. 228 p., 3 pls., geol. map, scale 1:24,000; tectonic map, scale approx. 1:62,500	20.10 (OC) 21.65 (M)
A 178	Geology and mineral resources of the New Holland quadrangle, Pennsylvania (Ephrata, Terre Hill, Leola, and New Holland 7.5-minute quadrangles, Lancaster County), A. I. Jonas and G. W. Stose. 1926; 2nd printing, 1969. 40 p., 7 pls., geol. map, scale 1:62,500	4.00 (OC) 5.25 (M)
A 187ab	Geology and mineral resources of the Temple and Fleetwood quadrangles, Berks County, Pennsylvania, D. B. MacLachlan. 1979. 71 p., 2 pls., geol. map, scale 1:24,000; environ. geol. map, tectonic map, scale 1:48,000	14.10 (OC) 15.85 (M)
A 187cd	Geology and mineral resources of the Reading and Birdsboro quadrangles, Berks County, Pennsylvania, D. B. MacLachlan. 1983; revised, 1992. Geol. map and text on 1 pl.	9.70 (OC) 11.15 (M)
A 194cd	Geology and mineral resources of the Hickory Run and Blakeslee quadrangles, Carbon and Monroe Counties, Pennsylvania, W. D. Sevon. 1975. 2 pls., bedrock geol. map with text on reverse, surficial geol. map	10.50 (OC) 12.05 (M)
A 195ab	Geology and mineral resources of the Christmans and Pohopoco Mountain quadrangles, Carbon and Monroe Counties, Pennsylvania, W. D. Sevon. 1975. 2 pls., bedrock geol. map with text on reverse, surficial geol. map	12.90 (OC) 14.45 (M)
A 195cd	Geology and mineral resources of the Lehighton and Palmerton quadrangles, Carbon and Northampton Counties, Pennsylvania, J. B. Epstein, W. D. Sevon, and J. D. Glaeser. 1974. 460 p., 4 pls., bedrock geol. map, surficial geol. map	27.60 (OC) 29.35 (M)
A 197	Geology of the Precambrian rocks and Hardyston Formation of the Boyertown quadrangle (Manatawny, East Greenville, Boyertown, and Sassamansville 7.5-minute quadrangles, Berks, Montgomery, and Lehigh Counties), T. V. Buckwalter. 1959. [15 p.], 1 pl., geol. map	3.70 (OC) 5.05 (M)

COUNTY REPORTS 7

	Geology and mineral resources of the Tobyhanna and Buck Hill Falls	11 (0 (00)
	quadrangles, Monroe County, Pennsylvania, W. D. Sevon. 1975. 2 pls., bedrock geol. map with text on reverse, surficial geol. map	11.60 (OC) 13.15 (M)
A 204cd	Geology and mineral resources of the Pocono Pines and Mount Pocono quadrangles, Monroe County, Pennsylvania, T. M. Berg, W. D. Sevon, and	13.20 (OC)
	M. F. Bucek. 1977. 66 p., 3 pls., bedrock geol. map, surficial geol. map	15.05 (M)
A 205a	Geology and mineral resources of the Brodheadsville quadrangle, Monroe and Carbon Counties, Pennsylvania, T. M. Berg. 1975. 60 p., 3 pls., bedrock geol. map, surficial geol. map	10.90 (OC) 12.75 (M)
A 206	Allentown quadrangle—Mineral resources (Catasauqua, Nazareth, Allentown East, and Hellertown 7.5-minute quadrangles, Northampton, Lehigh, and Bucks Counties), B. L. Miller. 1925. 195 p., 15 pls., geol. and econ. geol. map, scale 1:62,500	*
A 214a	Geology and mineral resources of the Skytop quadrangle, Monroe and Pike Counties, Pennsylvania, W. D. Sevon and T. M. Berg. 1978. 33 p., 1 pl., geol. map	7.50 (OC) 8.95 (M)
A 214c	Surficial geology of the East Stroudsburg 7½ minute quadrangle, Monroe County, Pennsylvania, M. F. Bucek. 1971; 2nd printing, 1974. 40 p., 1 pl., surficial geol. map	3.05 (OC) 4.30 (M)
A 223	Geology and economic resources of the Pennsylvania portion of the Milford and Port Jervis 15-minute quadrangles (Shohola, Pond Eddy, Edgemere, Milford, Port Jervis North, and Port Jervis South 7.5-minute quadrangles,	
	Pike County), F. W. Fletcher and D. L. Woodrow. 1970. 64 p., 2 pls., geol. map, scale 1:62,500	2.40 (OC) 3.75 (M)
-	REPORTS	
	1:62,500 unless otherwise indicated. County reports are numbered alphabetithe Commonwealth.)	
C 1, Pt. 1		*
•	the Commonwealth.) Geology and mineral resources of Adams County, Pennsylvania, G. W.	*
Pt. 1 C 1,	Geology and mineral resources of Adams County, Pennsylvania, G. W. Stose. 1932. 153 p., 26 pls., geol. map, scale 1:125,000	
Pt. 1 C 1, Pt. 2 C 1,	Geology and mineral resources of Adams County, Pennsylvania, G. W. Stose. 1932. 153 p., 26 pls., geol. map, scale 1:125,000	*
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Pt. 1 C 1, Pt. 2 C 1, Pt. 3 C 9	Geology and mineral resources of Adams County, Pennsylvania, G. W. Stose. 1932. 153 p., 26 pls., geol. map, scale 1:125,000	* * 3.70 (OC) 5.55 (M)
Pt. 1 C 1, Pt. 2 C 1, Pt. 3 C 9 C 26 C 30	Geology and mineral resources of Adams County, Pennsylvania, G. W. Stose. 1932. 153 p., 26 pls., geol. map, scale 1:125,000	* * 3.70 (OC) 5.55 (M) *

C 56A	Geology and mineral resources of southern Somerset County, Pennsylvania, N. K. Flint. 1965; 3rd printing, 1981. 267 p., 13 pls., geol. map, coal reserve maps	7.80 (OC) 9.35 (M)
C 67	Geology and mineral resources of York County, Pennsylvania, G. W. Stose and A. I. Jonas. 1939; 3rd printing, 1973. 199 p., 38 pls., geol. map	*
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G 22	Trenton and sub-Trenton of outcrop areas in New York, Pennsylvania and Maryland, F. M. Swartz. 1948; 2nd printing, 1973. 103 p. (reprinted from AAPG Bulletin, v. 32, no. 8, p. 1493–1595)	1.00 (OC) 2.25 (M)
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PR 188	Oil and gas developments in Pennsylvania in 1974, W. S. Lytle. 1975. 38 p.	1.70 (OC) 2.95 (M)
PR 189	Oil and gas developments in Pennsylvania in 1975, W. S. Lytle, R. G. Piotrowski, and Louis Heyman. 1976. 41 p.	1.50 (OC) 2.75 (M)
PR 190	Oil and gas developments in Pennsylvania in 1976, W. S. Lytle, Louis Heyman, R. G. Piotrowski, and S. A. Krajewski. 1977; 2nd printing, 1981. 49 p	1.60 (OC) 2.85 (M)
PR 191	Oil and gas developments in Pennsylvania in 1977, Louis Heyman and C. L. Cozart. 1978; 2nd printing, 1984. 39 p.	1.60 (OC) 2.85 (M)
PR 192	Oil and gas developments in Pennsylvania in 1978, R. G. Piotrowski, C. L. Cozart, Louis Heyman, and others. 1979; 2nd printing, 1984. 61 p.	2.20 (OC) 3.45 (M)
PR 193	Oil and gas developments in Pennsylvania in 1979, compiled by R. G. Piotrowski. 1980; 2nd printing, 1983. 64 p.	2.10 (OC) 3.25 (M)
PR 194	Oil and gas developments in Pennsylvania in 1980 with ten year review and forecast, compiled by J. A. Harper. 1981. 97 p.	2.30 (OC) 3.55 (M)
PR 195	Oil and gas developments in Pennsylvania in 1981, compiled by J. A. Harper. 1982. 116 p.	2.00 (OC) 3.25 (M)
PR 196	Oil and gas developments in Pennsylvania in 1982, compiled by J. A. Harper. 1983. 119 p.	1.40 (OC) 2.65 (M)
PR 197	Oil and gas developments in Pennsylvania in 1983, J. A. Harper. 1984. 86 p.	1.15 (OC) 2.40 (M)
PR 198	Oil and gas developments in Pennsylvania in 1984, J. A. Harper. 1985. 82 p.	2.30 (OC) 3.55 (M)
PR 199	Oil and gas developments in Pennsylvania in 1985, J. A. Harper. 1986.	2.00 (OC) 3.25 (M)
PR 200	Oil and gas developments in Pennsylvania in 1986, J. A. Harper. 1987. 93 p.	1.80 (OC) 3.05 (M)
PR 201	Oil and gas developments in Pennsylvania in 1987, J. A. Harper and C. L. Cozart. 1988. 80 p.	1.75 (OC) 3.00 (M)
PR 202	Oil and gas developments in Pennsylvania in 1988, J. A. Harper and C. L. Cozart. 1989. 110 p.	2.35 (OC) 3.60 (M)
PR 203	Oil and gas developments in Pennsylvania in 1989, J. A. Harper and C. L. Cozart. 1990. 92 p.	2.35 (OC) 3.60 (M)
PR 204	Oil and gas developments in Pennsylvania in 1990 with ten-year review and forecast, J. A. Harper and C. L. Cozart. 1992. 85 p.	1.15 (OC) 2.40 (M)
PR 205	Oil and gas developments in Pennsylvania in 1991, C. L. Cozart and J. A. Harper. 1993. 96 p.	2.80 (OC) 4.10 (M)

SPECIAL BULLETINS

 $(13\frac{1}{2}$ " x 18" folios. Map scale 1:24,000 unless otherwise indicated.)

SB 1	Oil-bearing sands in southwestern Pennsylvania (preliminary report), L. S. Matteson and D. A. Busch. 1944. 16 p., 55 pls.	*
SB 2	Oil and gas field farm line maps of the Franklin and Oil City quadrangles, Pennsylvania, compiled by P. A. Dickey and L. S. Matteson. 1945; 3rd printing, 1981. 18 maps (supplement to M 24 and M 25)	1.00 (OC) 2.25 (M)
SB 3	Oil and gas field property line maps of the Hilliards quadrangle, Pennsylvania, compiled by R. E. Sherrill. 1946; 2nd printing, 1965. 9 maps	1.00 (OC) 2.25 (M)
SB 4	Oil and gas field property line maps of the Titusville quadrangle, Pennsylvania, collected by P. A. Dickey and compiled by Lillian Heeren. 1946; 2nd printing, 1965. 9 maps (supplement to M 21)	1.00 (OC) 2.25 (M)
SB 5	Oil and gas field atlas of the Bradford quadrangle, Pennsylvania, compiled by C. R. Fettke and Virginia Fairall. 1951. Unpaged appendix, 10 maps (includes 1 geol. structure map, scale approx. 1:62,500)	1.40 (OC) 3.00 (M)
SB 6	Oil and gas field atlas of the Smethport quadrangle, compiled by W. H. Seifert, C. R. Fettke, and Virginia Fairall. 1951. Unpaged appendix, 10 maps (includes 1 geol. structure map, scale approx. 1:62,500)	1.40 (OC) 3.00 (M)
SB 7	Oil and gas field atlas of the Butler quadrangle, Pennsylvania, compiled by W. S. Lytle and L. A. Heeren. 1955. Unpaged appendix, 10 maps (includes 1 geol. structure map, scale approx. 1:62,500)	1.40 (OC) 3.00 (M)
SB 8	Preliminary report on a regional stratigraphic study of Devonian rocks of Pennsylvania, T. H. Jones and A. S. Cate. 1957. 5 p., 7 pls., isopach and lithofacies maps, scale 1:1,000,000	2.00 (OC) 3.35 (M)
SB 9	Oil and gas field atlas of the Foxburg quadrangle, Pennsylvania, compiled by J. M. Bergsten and L. A. Heeren. 1961. 26 p., 4 pls., 10 maps (includes 1 geol. structure map, scale approx. 1:62,500)	3.45 (OC) 5.05 (M)
SB 10	Stratigraphic studies of the Silurian rocks of Pennsylvania—Part 1, Stratigraphic cross sections of Lower Devonian and Silurian rocks in western Pennsylvania and adjacent areas, A. S. Cate. 1961. 3 p., 5 pls	2.10 (OC) 3.35 (M)
SB 11	Stratigraphic studies of the Silurian rocks of Pennsylvania—Part 2, Subsurface maps of the Silurian rocks of western Pennsylvania and adjacent areas, A. S. Cate. 1965. 8 p., 9 pls., isopach maps, geol. structure maps, scale 1:1,000,000	2.40 (OC) 4.00 (M)
WATER R	ESOURCE REPORTS	
W 1	Ground water in southwestern Pennsylvania, A. M. Piper, 1933. 406 p., 1 pl., geol. map, scale 1:380,160	*
W 2	Ground water in southeastern Pennsylvania, G. M. Hall. 1934; 3rd printing, 1973. 255 p., 7 pls., geol. map, scale 1:380,160	*
W 3	Ground water in northwestern Pennsylvania, R. M. Leggette. 1936; 2nd printing, 1957. 215 p., 9 pls., geol. map, scale 1:380,160	*
W 4	Ground water in northeastern Pennsylvania, S. W. Lohman. 1937; 2nd printing, 1957. 312 p., 7 pls., geol. map, scale 1:380,160	*
W 5	Ground water in south-central Pennsylvania, S. W. Lohman. 1938; 3rd printing, 1974. 315 p., 17 pls., geol. map, scale approx. 1:360,000 (1 in. = approx. 5.7 mi)	*

W 6	Ground water in north-central Pennsylvania, S. W. Lohman. 1939; 3rd print-	
	ing, 1973. 219 p., 11 pls., geol. map, scale 1:380,160	*
W 7	Ground-water resources of Pennsylvania, S. W. Lohman. 1941. 32 p., 1 pl	*
W 8	Ground-water resources of the valley-fill deposits of Allegheny County, Pennsylvania, J. H. Adamson, Jr., J. B. Graham, and N. H. Klein. 1949. 181 p., 5 pls. (supplement to W 1)	2.10 (OC) 3.60 (M)
W 9	Ground-water resources of Beaver County, Pennsylvania, D. W. Van Tuyl and N. H. Klein. 1951. 84 p., 1 pl., geol. map, scale approx. 1:62,500 (supplement to W 3)	1.70 (OC) 2.95 (M)
W 10	Ground water for air conditioning at Pittsburgh, Pennsylvania, D. W. Van Tuyl. 1951. 34 p. (supplement to W 8)	1.00 (OC) 2.25 (M)
W 11	Ground water resources of Bucks County, Pennsylvania, D. W. Greenman. 1955. 67 p., 2 pls., geol. map, scale 1:62,500	*
W 12	Borehole geophysical methods for analyzing specific capacity of multi- aquifer wells, G. D. Bennett and E. P. Patten, Jr. 1960. 25 p. (reprinted from U.S. Geological Survey Water-Supply Paper 1536-A)	1.00 (OC) 2.25 (M)
W 13	Ground-water resources of the Coastal Plain area of southeastern Pennsylvania, D. W. Greenman, D. R. Rima, W. N. Lockwood, and Harold Meisler. 1961. 375 p., 22 pls.	10.50 (OC) 12.10 (M)
W 14	Geology and hydrology of the Stockton Formation in southeastern Pennsylvania, D. R. Rima, Harold Meisler, and Stanley Longwill. 1962. 111 p., 4 pls., geol. map, scale 1:24,000	*
W 15	Geology and hydrology of the Neshannock quadrangle, Mercer and Lawrence Counties, Pennsylvania, L. D. Carswell and G. D. Bennett. 1963. 90 p., 3 pls., geol. map, scale 1:24,000	*
W 16	Geology and hydrology of the Mercer quadrangle, Mercer, Lawrence, and Butler Counties, Pennsylvania, C. W. Poth. 1963; 2nd printing, 1974. 149 p., 5 pls., bedrock geol. map, scale 1:48,000; surficial geol. map, scale 1:62,500	5.70 (OC) 7.05 (M)
W 17	Methods of flow measurement in well bores, E. P. Patten, Jr., and G. D. Bennett. 1962; 2nd printing, 1974. 28 p. (reprint of U.S. Geological Survey Water-Supply Paper 1544–C)	free
W 18	Hydrogeology of the carbonate rocks of the Lebanon Valley, Pennsylvania, Harold Meisler. 1963. 81 p., 3 pls., geol. map, scale 1:24,000	4.10 (OC) 6.05 (M)
W 19	Application of electrical and radioactive well logging to ground-water hydrology, E. P. Patten, Jr., and G. D. Bennett. 1963. 60 p. (reprint of U.S. Geo-	
W 20	logical Survey Water-Supply Paper 1544–D) The ground-water observation-well program in Pennsylvania, C. W. Poth. 2nd ed., 1972. 18 p.	* 1.00 (OC) 2.05 (M)
W 21	Hydrology of the New Oxford Formation in Adams and York Counties, Pennsylvania, P. R. Wood and H. E. Johnston. 1964. 66 p., 1 pl., geol. map, scale approx. 1:62,500	2.50 (OC) 4.45 (M)
W 22	Ground-water resources of the Brunswick Formation in Montgomery and Berks Counties, Pennsylvania, S. M. Longwill and C. R. Wood. 1965. 59 p., 1 pl., geol. map, scale 1:62,500	*
W 23	Hydrology of the New Oxford Formation in Lancaster County, Pennsylvania, H. E. Johnston. 1966. 80 p., 1 pl., geol. map, scale 1:62,500	1.70 (OC) 2.95 (M)
W 24	Geology and hydrology of the Martinsburg Formation in Dauphin County, Pennsylvania, L. D. Carswell, J. R. Hollowell, and L. B. Platt. 1968. 54 p., 1 pl., geol. map, scale 1:24,000	2.65 (OC) 3.90 (M)

W 25	Hydrology of the metamorphic and igneous rocks of central Chester County, Pennsylvania, C. W. Poth. 1968; 2nd printing, 1973. 84 p., 3 pls., geol. maps, scale 1:24,000	*
W 26	Hydrogeology of the carbonate rocks of the Lancaster 15-minute quadrangle, southeastern Pennsylvania, Harold Meisler and A. E. Becher. 1971; 2nd printing, 1973. 149 p., 2 pls., geol. map, scale 1:24,000	*
W 27	Ground-water resources of the Loysville and Mifflintown quadrangles in south-central Pennsylvania, H. E. Johnston. 1970; 2nd printing, 1973. 96 p., 2 pls., geol. maps, scale approx. 1:31,680 (1 in. = approx. 2,640 ft)	3.85 (OC) 5.10 (M)
W 28	Hydrology of the Pleistocene sediments in the Wyoming Valley, Luzerne County, Pennsylvania, J. R. Hollowell. 1971; 2nd printing, 1973. 77 p., 4 pls., geol. map, scale 1:24,000	6.20 (OC) 8.45 (M)
W 29	Ground-water resources of Montgomery County, Pennsylvania, T. G. Newport. 1971; 2nd printing, 1973. 83 p., 2 pls.	*
W 30	Hydrology of the Martinsburg Formation in Lehigh and Northampton Counties, Pennsylvania, C. W. Poth. 1972. 52 p., 1 pl., geol. map, scale approx. 1:62,500	3.00 (OC) 4.55 (M)
W 31	Water resources of Lehigh County, Pennsylvania, C. R. Wood, H. N. Flippo, Jr., J. B. Lescinsky, and J. L. Barker. 1972. 263 p., 5 pls., geol. maps, scales 1:62,500 and 1:24,000	10.50 (OC) 12.05 (M)
W 32	Summary ground-water resources of Clarion County, Pennsylvania, T. G. Newport. 1973. 42 p., 1 pl., geol. map, scale 1:125,000	2.50 (OC) 3.75 (M)
W 33	Geology and ground-water resources of northern Mercer County, Pennsylvania, G. R. Schiner and G. E. Kimmel. 1976. 136 p., 2 pls., geol. maps, scale 1:24,000	20.15 (OC) 22.30 (M)
W 34	Summary ground-water resources of Armstrong County, Pennsylvania, C. W. Poth. 1973. 38 p., 1 pl., geol. map, scale 1:125,000	2.20 (OC) 3.55 (M)
W 35	Summary ground-water resources of Allegheny County, Pennsylvania, J. T. Gallaher. 1973. 71 p., 1 pl., geol. map, scale 1:125,000	*
W 36	Summary ground-water resources of Butler County, Pennsylvania, C. W. Poth. 1973. 49 p., 1 pl., geol. map, scale 1:125,000	2.20 (OC) 3.55 (M)
W 37	Summary ground-water resources of Westmoreland County, Pennsylvania, T. G. Newport. 1973. 49 p., 1 pl., geol. map, scale 1:125,000	2.20 (OC) 3.55 (M)
W 38	Summary ground-water resources of Washington County, Pennsylvania, T. G. Newport. 1973. 32 p., 1 pl., geol. map, scale 1:125,000	2.20 (OC) 3.55 (M)
W 39	Summary ground-water resources of Beaver County, Pennsylvania, C. W. Poth. 1973. 39 p., 1 pl., geol. map, scale 1:125,000	2.20 (OC) 3.55 (M)
W 40	Summary ground-water resources of Luzerne County, Pennsylvania, T. G. Newport. 1977. 63 p., 1 pl., geol. map, scale 1:125,000	6.40 (OC) 7.65 (M)
W 41	Ground-water resources of Lackawanna County, Pennsylvania, J. R. Hollowell and H. E. Koester. 1975. 106 p., 3 pls., geol. map, scale 1:62,500	13.40 (OC) 15.00 (M)
W 42	Ground-water resources of central and southern York County, Pennsylvania, O. B. Lloyd, Jr., and D. J. Growitz. 1977. 93 p., 2 pls., geol. map, scale 1:62,500	*
W 43	Summary ground-water resources of Lancaster County, Pennsylvania, C. W. Poth. 1977. 80 p., 1 pl., geol. map, scale 1:125,000	*
W 44	Geology and groundwater resources of northern Berks County, Pennsylvania, C. R. Wood and D. B. MacLachlan. 1978; 2nd printing, 1992. 91 p., 2 pls., geol. map, scale 1:62,500	20.35 (OC) 22.10 (M)

W 45	Groundwater resources of the DuBois area, Clearfield and Jefferson Counties, Pennsylvania, E. T. Shuster. 1979. Scale 1:48,000, 2 pls., geol. map with short text	5.75 (OC) 7.35 (M)
W 46	Geology and groundwater resources of western Crawford County, Pennsylvania, G. R. Schiner and J. T. Gallaher. 1979. 103 p., 3 pls., geol. map, map showing thickness of glacial deposits, scale 1:50,000	14.40 (OC) 16.35 (M)
W 47	Geology and groundwater resources of Monroe County, Pennsylvania, L. D. Carswell and O. B. Lloyd, Jr. 1979. 61 p., 1 pl., geol. map, scale 1:48,000	7.50 (OC) 9.20 (M)
W 48	Summary groundwater resources of Centre County, Pennsylvania, C. R. Wood. 1980. 60 p., 1 pl., geol. map, scale 1:100,000 (1 in. = approx. 1.6 mi)	10.10 (OC) 11.70 (M)
W 49	Groundwater resources of the Gettysburg and Hammer Creek Formations, southeastern Pennsylvania, C. R. Wood. 1980. 87 p., 2 pls., geol. maps, scale 1:50,000	11.00 (OC) 12.95 (M)
W 50	Groundwater and geology of the Cumberland Valley, Cumberland County, Pennsylvania, A. E. Becher and S. I. Root. 1981. 95 p., 3 pls., geol. map, scale 1:50,000	*
W 51	Groundwater resources of the Williamsport region, Lycoming County, Pennsylvania, O. B. Lloyd, Jr., and L. D. Carswell. 1981. 69 p., 2 pls., geol. map, scale 1:50,000	9.80 (OC) 11.75 (M)
W 52	Summary groundwater resources of Adams County, Pennsylvania, L. E. Taylor and D. W. Royer. 1981. 50 p., 1 pl., geol. map, scale 1:50,000	12.30 (OC) 13.90 (M)
W 53	Groundwater resources in the Cumberland and contiguous valleys of Franklin County, Pennsylvania, A. E. Becher and L. E. Taylor. 1982. 67 p., 1 pl., geol. map, scale 1:50,000	8.50 (OC) 10.10 (M)
W 54	Groundwater resources of the Juniata River basin, Pennsylvania, L. E. Taylor, W. H. Werkheiser, N. S. duPont, and M. L. Kriz. 1982. 131 p., 1 pl., geol. map, scale 1:250,000	8.90 (OC) 10.15 (M)
W 55	Summary groundwater resources of Lebanon County, Pennsylvania, D. W. Royer. 1983. 84 p., 1 pl., geol. map, scale 1:50,000	13.70 (OC) 15.30 (M)
W 56	Groundwater resources of the West Branch Susquehanna River basin, Pennsylvania, L. E. Taylor, W. H. Werkheiser, and M. L. Kriz. 1983. 143 p., 1 pl., geol. map, scale 1:250,000	*
W 57	Groundwater resources of the Lower Susquehanna River basin, Pennsylvania, L. E. Taylor and W. H. Werkheiser. 1984; 2nd printing, 1986. 130 p., 1 pl., geol. map, scale 1:250,000	14.75 (OC) 16.65 (M)
W 58	Groundwater resources of the Upper Susquehanna River basin, Pennsylvania, L. E. Taylor. 1984; 2nd printing, 1992. 136 p., 1 pl., geol. map, scale 1:250,000	13.05 (OC) 14.90 (M)
W 59	Summary groundwater resources of Perry County, Pennsylvania, D. W. Royer. 1984. 70 p., 1 pl., geol. map, scale 1:50,000	14.50 (OC) 16.25 (M)
W 60	Groundwater resources of Fayette County, Pennsylvania, T. A. McElroy. 1988. 57 p., 2 pls., geol. map, scale 1:50,000	14.60 (OC) 16.20 (M)
W 61	Groundwater resources of the Berwick-Bloomsburg-Danville area, east-central Pennsylvania, J. H. Williams and D. A. Eckhardt. 1987. 76 p., 1 pl., geol. map, scale 1:50,000	9.40 (OC) 10.65 (M)
W 62	Groundwater resources of Erie County, Pennsylvania, D. B. Richards, H. J. McCoy, and J. T. Gallaher. 1987. 101 p., 2 pls., geol. map, scale 1:62,500	15.30 (OC) 16.90 (M)

W 63	Water resources and the effects of coal mining, Greene County, Pennsylvania, J. D. Stoner, D. R. Williams, T. F. Buckwalter, and others. 1987. 166 p., 2 pls., geol. map, scale 1:50,000	15.55 (OC) 17.15 (M)
W 64	Groundwater resources in and near the anthracite basins of Schuylkill and adjacent counties, Pennsylvania, A. E. Becher. 1991. 59 p., 1 pl., geol. map, scale 1:100,000 (1 in. = approx. 1.6 mi)	10.70 (OC) 12.00 (M)
W 65	Groundwater resources of Pike County, Pennsylvania, D. K. Davis. 1989. 63 p., 2 pls., bedrock geol. map, surficial geol. map, scale 1:50,000	16.50 (OC) 18.10 (M)
W 66	Groundwater resources of Delaware County, Pennsylvania, W. T. Balmer and D. K. Davis. 1996. 67 p., 1 pl., geol. map, scale 1:50,000	10.25 (OC) 11.50 (M)
W 67	Groundwater resources of Cambria County, Pennsylvania, T. A. McElroy. 1998. 49 p., 1 pl., geol. map, scale 1:50,000	11.42 (OC) 12.66 (M)
W 68	Hydrogeology and groundwater quality of the glaciated valleys of Bradford, Tioga, and Potter Counties, Pennsylvania, J. H. Williams, L. E. Taylor, and D. J. Low. 1998. 89 p., 1 pl. on 2 sheets, surficial geol. map, scale 1:100,000 (1 in. = approx. 1.6 mi)	14.23 (OC) 15.47 (M)

SELECTED PUBLICATIONS

Pennsylvania geology. A quarterly (originally bimonthly) publication issued by the Bureau of Topographic and Geologic Survey. Generally 16 p., illustrated in two colors. Series begins with v. 1, no. 1, August 1969

free

Pennsylvania. Excerpts from U.S. Bureau of Mines Minerals Yearbook. Generally 8–12 p. Annual publication on nonfuel mineral production in Pennsylvania for the years 1988–91......

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PENNSYLVANIA TOPOGRAPHIC AND GEOLOGIC SURVEY COMMISSION

(Third Survey)

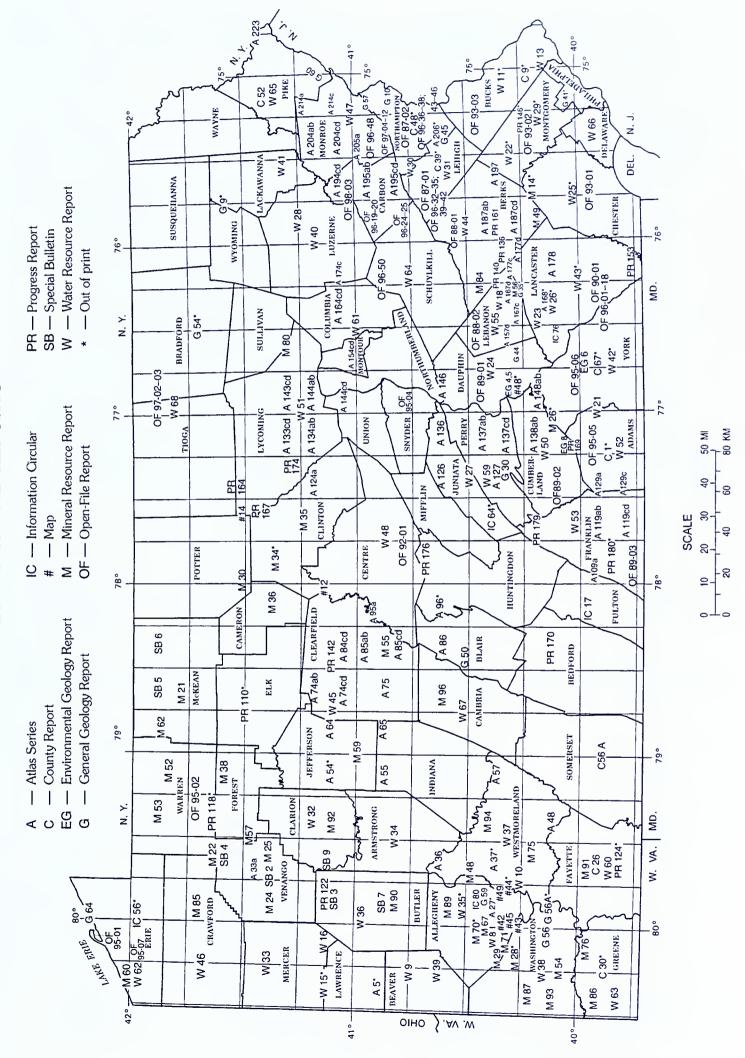
SELECTED PUBLICATIONS

ECONOMIC REPORTS

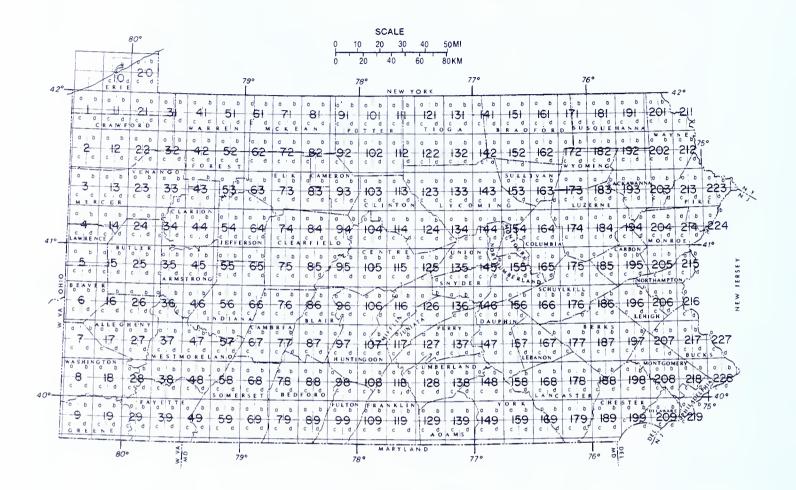
1	Geology of the oil and gas fields in Sewickley quadrangle, M. J. Munn. 1910. 171 p., 10 pls.	*
2	Geologic map of southwestern Pennsylvania. 1914. 29 p., 10 pls	*
3	Geology of the oil and gas fields of the Clarion quadrangle, M. J. Munn. 1910. 111 p., 9 pls.	*
4	The mineral pigments of Pennsylvania, B. L. Miller. 1911. 101 p., 29 pls	*
5	Preliminary report on the talc and serpentine of Northampton County and the portland cement materials of the Lehigh district, F. B. Peck. 1911.	
	65 p., 17 pls.	*
6	Graphite deposits of Pennsylvania, B. L. Miller. 1912. 147 p., 17 pls	*
7	Engineering data. 1913, 450 p., 3 pls	*

8	The mineral production of Pennsylvania, 1911, R. R. Hice. 1911.
Pt. A	Coal and coke. 139 p.
Pt. C	Clay and clay products. 51 p.
Pt. E	Quarry products, granite, trap rock, sandstone, blue stone, marble, limestone, lime. 84 p.
9	Minerals of Pennsylvania, A. P. Brown and Frederick Ehrenfeld. 1913. 160 p., 10 pls.
10	The Broad-Top coal field of Huntingdon, Bedford and Fulton Counties, J. H. Gardner. 1913. 81 p., 32 pls.
11	The mineral production of Pennsylvania for the year 1913. $1915.\ 108\ p.$
12	Glass manufacture and the glass sand industry of Pennsylvania, C. R. Fettke. 1919. 278 p., 108 pls.
	REPORTS ntain mineral resource data.)
	Report of Topographic and Geologic Survey Commission of Pennsylvania, 1910-1912. 1912. 182 p., 21 pls.
	Report of Topographic and Geologic Survey Commission of Pennsylvania, 1913–1914. 1914. 232 p., 5 pls.

KEY TO AREAL REPORTS



KEY TO QUADRANGLE NUMBERING SYSTEM



QUADRANGLE INDEX

The following list is to be used in conjunction with the index map above. The names of 15-minute quadrangles correspond to the numbered headings, and the associated 7.5-minute quadrangles correspond to the lettered headings. The index begins with the 15-minute quadrangle located in the upper left corner of the map.

- 1. Girard
 - a. East Springfield
 - b. Albion
 - c. Beaver Center
 - d. Conneautville
- 2. Linesville
 - a. Linesville
 - b. Harmonsburg
 - c. Hartstown
 - d. Conneaut Lake
- 3. Shenango
 - a. Greenville West
 - b. Greenville East
 - c. Sharpsville
 - d. Fredonia
- 4. Neshannock
 - a. Sharon East
 - b. Greenfieldc. Edinburg
 - d. New Castle North

- 5. New Castle
 - a. Bessemer
 - b. New Castle South
 - c. New Galilee
 - d. Beaver Falls
- 6. Beaver
 - a. Midland
 - b. Beaver
 - c. Hookstown
- d. Aliquippa
- 7. Burgettstown
 - a. Burgettstown
 - b. Clintonc. Avella
 - d. Midway
- 8. Claysville
 - a.- West Middletown
 - b. Washington West
 - c. Claysville
 - d. Prosperity

- 9. Rogersville
 - a. Wind Ridge
 - b. Rogersville
 - c. New Freeport
 - d. Holbrook
- 10. Erie
 - a-b. Erie North
 - c. Swanville
 - d. Erie South
- 11. Cambridge Springs
 - a. Edinboro North
 - b. Cambridge Springs NE
 - c. Edinboro South
 - d. Cambridge Springs
- 12. Meadville
 - a. Meadville
 - b. Blooming Valley
 - c. Geneva
 - d. Cochranton

- 13. Stoneboro
 - a. Hadley
 - b. New Lebanon
 - c. Jackson Center
 - d. Sandy Lake
- 14. Mercer
 - a. Mercer
 - b. Grove City
 - c. Harlansburg
 - d. Slippery Rock
- 15. Zelienople
 - a. Portersville
 - b. Prospect
 - c. Zelienople
 - d. Evans City
- 16. Sewickley
 - a. Baden
 - b. Mars
 - c. Ambridge
 - d. Emsworth

17.	Carnegie a. Oakdale b. Pittsburgh West c. Canonsburg d. Bridgeville	31.	Corry a. Corry b. Columbus c. Spartansburg d. Spring Creek	45.	Rural Valley a. Templeton b. Distant c. Mosgrove d. Rural Valley
18.	Amity a. Washington East b. Hackett c. Amity d. Ellsworth	32.	Titusville a. Titusville North b. Grand Valley c. Titusville South d. Pleasantville	46.	Elders Ridge a. Whitesburg b. Elderton c. Avonmore d. McIntyre
19.	Waynesburg a. Waynesburg b. Mather c. Oak Forest d. Garards Fort	33.	Oil City a. Oil City b. President c. Cranberry d. Kossuth	47.	Latrobe a. Saltsburg b. Blairsville c. Latrobe d. Derry
20.	North East a. Harborcreek b. North East c. Hammett d. Wattsburg	34.	Foxburg a. Emlenton b. Knox c. Parker d. Rimersburg	48.	Donegal a. Mammoth b. Stahlstown c. Donegal d. Seven Springs
21.	Union City a. Waterford b. Union City c. Millers Station d. Lake Canadohta	35.	Kittanning a. Chicora b. East Brady c. Worthington d. Kittanning	49.	Confluence a. Mill Run b. Kingwood c. Ohiopyle d. Confluence
22.	Townville a. Townville b. Centerville c. Sugar Lake d. Dempseytown	36.	Freeport a. Freeport b. Leechburg c. New Kensington East	51.	Warren a. Russell b. Scandia c. Warren d. Clarendon
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INDEX TO PUBLICATIONS ON PENNSYLVANIA

This index is designed to help you find the publications in which you are interested and is divided into two parts, a county index and a subject index. When you have found a publication series and number (e.g., A 27), refer to the list of publications to find the title of the publication. The title will help you decide if the publication contains the specific type of information you desire. Publications covering the whole state or large portions of the state, such as Map 1 and EG 1, are not listed in the county index. Do not order publications from this index; refer to the list of publications for series, number, and title.

Much additional information on Pennsylvania geology is available in publications not covered in this list. The reader is referred to Pennsylvania Geological Survey General Geology Reports 34, 42, 61, and 73 for a more comprehensive list of articles on Pennsylvania geology written before 1979.

Abbreviations used in this index are as follows:

Pennsylvania Third (Commission) Survey-Pa. Geol. Survey (3rd)

Pennsylvania Geological Survey, fourth series—Pa. Geol. Survey (4th)

A — Atlas Series Map — Map

C — County Report OF — Open-File Report

EG — Environmental Geology Report PG — Park Guide
ES — Educational Series PR — Progress Report
G — General Geology Report SB — Special Bulletin

IC — Information Circular W — Water Resource Report

M — Mineral Resource Report

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